VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1-14 have been cancelled.

Claims 15-18 have been added as follows:

15. (New) A fail-safe engine cooling control system for a hybrid electric vehicle (HEV) having an internal combustion engine, an electric traction motor, and a storage battery for furnishing power to the electric traction motor, with said cooling control system comprising:

an engine temperature sensor;

a battery state of charge indicator;

a vehicle system controller (VSC) for receiving a temperature signal from the engine temperature sensor and a state of charge signal from the battery state of charge indicator; and

an engine control unit operated by the VSC, with the engine control unit being directed to operate the engine in a fail-safe mode in the event that the engine temperature exceeds a predetermined temperature threshold, with said engine controller halting the engine if the battery state of charge is greater than a predetermined charge threshold, and with said engine controller operating the engine on alternating cylinders in the event that the battery state of charge is less than said predetermined charge threshold.

16. (New) A fail-safe engine cooling system according to Claim 15, wherein said VSC directs the engine controller to operate the engine on alternating cylinders when the speed of the HEV exceeds a predetermined speed threshold and the engine temperature exceeds said predetermined temperature threshold.

17. (New) A fail-safe engine cooling system according to Claim 15, wherein said VSC directs the engine controller to operate the engine on alternating cylinders when an air

conditioning system incorporated in the HEV is operating and the engine temperature exceeds said predetermined temperature threshold.

18. (New) A method for operating an engine in a hybrid electric vehicle having both an internal combustion engine and a traction motor, with said method comprising the steps of:

measuring an operating temperature of the engine;
measuring a state of charge of an electric storage device connected to said traction motor; and
in the event that said operating temperature exceeds a predetermined temperature threshold and said state of charge is less than a predetermined charge threshold, operating the engine on alternating cylinders so as to lower the operating temperature of the engine.

In the Abstract:

Please amend the Abstract as follows:

(Amended) ~~This invention is a fail-safe algorithm for a hybrid electric vehicle (HEV). The method and system allow an HEV to continue to operate without damage after the engine cooling system is compromised, such as when there has been a total loss of engine coolant. Goals include a fail-safe vehicle strategy to maintain acceptable engine temperatures and minimal noise, vibration and harshness (NVH), while greatly extending the vehicle's operating range. First is a determination if the vehicle can rely on an electric traction motor's torque output to operate the vehicle. If engine operation is needed, engine fueling and firing of the cylinders is alternated to allow those cylinders to cool when no combustion is occurring. Engine speed is also optimized. NVH must remain within acceptable levels under most operating conditions. Further, the HEV parallel mode of operation (i.e., with a generator motor brake applied) is prohibited. And finally, the speed of at least one engine compartment cooling fan is optimized to minimize electrical load while maximizing airflow~~. An engine cooling control system for a hybrid electric vehicle having an internal combustion engine and an electric traction

motor includes an engine temperature sensor, a battery state of charge indicator, and a vehicle system controller which operates the engine on alternating cylinders in the event that the battery state of charge is less than the predetermined charge threshold and the engine temperature is greater than an engine temperature threshold.

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